

Statement



Statement on the Annex to Decision CBD/COP/DEC/15/9 pursuant to Notification 2023-003 of the Secretariat of the Convention on Biological Diversity

Statement of the Permanent Senate Commission on Fundamental Issues of Biological Diversity of the DFG

Elaborated by Ralf Friedrich Bartenschlager (University Heidelberg), Erwin Beck (University Bayreuth), Sven Bradler (VBio), Jens Freitag (Leibniz-Institute IPK), Stefan Hain (Alfred-Wegener-Institute), Amber Hartman Scholz (Leibniz-Institute DSMZ), Evanson Chege Kamau (University Oldenburg), Alexandra-Maria Klein (University Freiburg), Jörg Overmann (Leibniz-Institute DSMZ), Alois Palmeshofer (University Würzburg), Sabine Schlacke (University Greifswald) and Björn Usadel (University Düsseldorf) with the assistance of Lucas Henicke (University Greifswald) and Frederick Qasem (University Greifswald).

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Contact person:
Dr. Meike Teschke
Life Sciences 1: Molecular and Organismic Biology
Telephone: +49 228 885-2336
meike.teschke@dfg.de

The Permanent Senate Commission on Fundamental Issues of Biological Diversity of the Deutsche Forschungsgemeinschaft (DFG, German Research Foundation) is an interdisciplinary, independent body of experts in biodiversity research that evaluates selected topics on the basis of scientific findings with regard to their social and political significance and advises various bodies of the DFG as well as governments and policymakers, both at a national and international level.

The 15th Conference of the Parties (COP) to the Convention on Biological Diversity (CBD) adopted *inter alia* a decision on Digital Sequence Information (DSI). In para. 9, the decision CBD/COP/DEC/15/9 sets out various criteria which a benefit-sharing mechanism for DSI should fulfill. In para. 6, the parties recognize that a so-called multilateral mechanism on the sharing of the benefits arising from the use of DSI which decouples access and utilization¹ has the potential to meet these criteria. In this context, in para. 16, the parties decide to establish such a multilateral mechanism, including a global fund. The decision also calls for a fair, transparent, inclusive, participatory and time-bound process to further develop and operationalize this mechanism, which is described in para. 17. The multilateral mechanism shall be further developed by the Ad hoc Open-Ended Working Group on Benefit-Sharing from the use of Digital Sequence Information on Genetic Resources (para. 18). This Working Group will *inter alia* take into account the elements identified in the annex to the decision. In response to the notification 2023-003² asking for views on the issues set out in the annex to Decision CBD/COP/DEC/15/9, **this statement highlights important aspects for the effective functioning of the mechanism, which are crucial from the perspective of basic research.**

¹ On the conception of the multilateral mechanism and various design options, see: <https://www.cbd.int/abs/DSI-webinar/DSIPolicyOptions2021.pdf> (last accessed 31st March 2023).

² CBD Executive Secretary, Notification – Submission of views on issues for further consideration for digital sequence information on genetic resources, Ref.: SCBD/NPU/DC/KG/CGA/90785, accessible at: <https://www.cbd.int/doc/notifications/2023/ntf-2023-003-abs-dsi-en.pdf> (last accessed 31st March 2023).

(a) Governance of the fund

From a research perspective, the Global Fund should be fully transparent, fair and equitable. Furthermore, scientific methodology and practice demonstrates the value of iterative information gathering and adaptive decision-making. We encourage parties to consider mechanisms that can evolve with time as new information and evidence becomes available.

(b) Triggering points for benefit-sharing

With regard to trigger points for benefit-sharing, a distinction needs to be made between trigger points for non-monetary versus monetary benefit-sharing. In basic research, for example, benefit-sharing can begin upstream already during initial access to the genetic resources from which DSI are generated, and subsequently often leads to multiple types of non-monetary benefit-sharing, and it frequently requires a significant financial commitment.

Multi-faceted collaborative research is typical for academic research performed in close collaboration with local partner universities and research institutions. Project-specific benefit-sharing can *inter alia* occur via conducting common research projects and can take the form of joint publications,³ capacity building and training, transfer of technology and provision of equipment, or creation of common databases and knowledge platforms. However, these non-monetary benefits are difficult to define with specific triggers and can be difficult to quantify. We encourage parties to consider non-monetary benefit-sharing more proactively. A concrete suggestion would be to allow users of both genetic resources and DSI to “self-report” benefits shared (such as those described above) to the ABS Clearinghouse website so that non-monetary benefit-sharing can be made more transparent to the CBD community.

(c) Contributions to the fund

Reference is made to the explanations in (b).

³ However, the limits of good scientific practice must be observed, i.e., authorship can for example only be considered according to the degree of involvement. On the concept of good scientific practice, see e.g.: https://www.dfg.de/en/research_funding/principles_dfg_funding/good_scientific_practice/ (last accessed 31st March 2023).

(d) Potential to voluntarily extend the multilateral mechanism to genetic resources or biological diversity

Given the expected rapid advances in technology over the coming decade and beyond, the significance of DSI will increase, while the genetic resources themselves might gradually become less relevant,⁴ particularly for non-environmental research areas.

In the exercise of the sovereignty of the contracting states over their genetic resources (Art. 3 CBD), parties can place genetic resources under the scope of a multilateral mechanism to facilitate and accelerate benefit-sharing. The idea of a "global multilateral benefit-sharing mechanism" is by no means alien to the Nagoya Protocol, but is already laid down in Art. 10 for transboundary situations. A joint multilateral method for benefit-sharing would lead to lower transaction costs and could ensure that benefit-sharing happens and is measurable. It also would avoid jurisdiction shopping between states participating in the multilateral mechanism. From the vantage point of the attractiveness for scientific research cooperation, we would welcome that states place benefit-sharing for genetic resources under the multilateral mechanism, as this reduces administrative hurdles and correspondingly increases legal certainty.

(e) Disbursement of monetary benefits, including information on geographical origin as one of the criteria

Depositing metadata including information on the countries of origin when DSI are uploaded to databases forms part of good scientific practice and is mandatory for many databases. However, in basic research, the value of DSI is not intrinsic to individual sequences. The comparability of a multitude of sequences, ideally of all known sequences, harbors the scientific value. As a rule, benefit-sharing should therefore be based on the entire global DSI dataset and not on individual sequences in order to promote simplicity and reflect the value of the whole.

Resources from the global fund could be distributed on the basis of project-based applications taking into account the development status of a country as well as that country's contribution to the global DSI dataset. This would create a fair incentive for individual countries to enable research leading to sequencing of new genetic resources and contribute to the expansion of the globally available knowledge base.⁵

⁴ See CBD/WG2020/REC/5/2, p.8, The ABS gap.

⁵ See in more detail: *Scholz et al.*, Multilateral benefit-sharing from digital sequence information will support both science and biodiversity conservation, *Nature communications*, 2022, Vol. 13, 1086. <https://doi.org/10.1038/s41467-022-28594-0>.

(f) Non-monetary benefit-sharing, including information on geographical origin as one of the criteria

As outlined in (e), depositing metadata, *inter alia* on the geographical and temporal origin, is a hallmark of good scientific practice.

(g) Other policy options for the sharing of benefits from the use of digital sequence information on genetic resources, including as identified through further analysis as referred to in paragraphs 6 and 7

Due to the large number of sequences available in the databases and the numerous users,⁶ bilateral approaches to benefit-sharing from DSI are not a viable option. In addition, tracking and tracing the use of DSI is, to our knowledge, not technically possible. Importantly, access to DSI must not be restricted as otherwise effective basic research, including research for biodiversity and conservation, would be greatly impacted. Against this background, only a multilateral mechanism can be a feasible solution.

Any options that combine a multilateral mechanism with the possibility for bilateral exceptions would represent a considerable impediment to basic research. Bilateral or partial bilateral options entail a risk of jurisdiction shopping, which is prevented in an overarching multilateral mechanism.

Moreover, mechanisms need to be developed to ensure benefit-sharing for involving traditional knowledge in order to enable countries to deal fairly with indigenous peoples and local communities (IPLC). Non-monetary benefit-sharing as outlined above also offers immense opportunities for the sustained promotion of IPLCs (see *infra* under (m)).

(h) Capacity development and technology transfer

Scientific research cooperation contributes to capacity building and technology transfer and represents a form of non-monetary benefit-sharing (see b). Scientific research cooperation can include project or institutional cooperation, joint efforts for education and training, joint laboratories, field stations or a joint use of research infrastructures. A clear framework for these approaches to benefit-sharing should be created in order to be used in an effective manner. In particular, the

⁶ The International Nucleotide Sequence Database Collaboration (INSDC) alone contains 228 million annotated sequences and has 10-15 million users, see: *Scholz et al.*, Multilateral benefit-sharing from digital sequence information will support both science and biodiversity conservation, *Nature communications*, 2022, Vol. 13, 1086. <https://doi.org/10.1038/s41467-022-28594-0>.

sustainable integration of IPLCs needs to be increased. We advocate a continuous increase of these efforts.

(i) Monitoring and evaluation and review of effectiveness

From a scientific point of view, the explicit mentioning of monitoring and evaluation processes is welcomed. It is important for research to create an adaptive system that reflects its current needs and is based on the available data to be "state of the art". Monitoring and evaluation processes should be anchored in binding procedures to ensure regular review. The processes should be based on a transparent selection of criteria. Against this background, the criterion of effectiveness mentioned here should also be clearly defined to make it operational.

(j) Adaptability of the mechanism to other resource mobilization instruments or funds

Reference is made to the explanations above.

(k) Interface between national systems and the multilateral mechanism on benefit-sharing

National systems that impose additional requirements on benefit-sharing can lead to a considerable additional effort and thus to a restriction of research activity. For example, solutions that require a national registration when publishing research results lead to considerable additional effort and corresponding costs.⁷ In order to create legal certainty, parties need to agree that national regulations are not possible once the multilateral mechanism has been accepted by a state. There should be no exception made for any data that has once been fed into the multilateral mechanism, as such an exception would again create a bilateral regime. In turn, this should also apply to DSI that were present in the databases *before* the respective new international agreement on DSI enters into force. We emphasize here that the scientific community supports a retroactive, all-encompassing multilateral solution because it is simple and will provide a broader and more comprehensive basis for benefit-sharing for provider countries. Countries with conflicting legal requirements would have to withdraw them or would not be able to participate in the multilateral mechanism. If countries withdraw their data from the public databases, there is a high

⁷ In relation to small and medium-sized enterprises, see also: *Michiels et al.*, Facing the Harsh Reality of Access and Benefit Sharing (ABS) Legislation: An Industry Perspective, *sustainability* 2022, Vol. 14, 277 (p. 6 et seq.). <https://doi.org/10.3390/su14010277>.

risk of a considerable reduction in international scientific research cooperation and, accordingly, a substantial decline in benefit-sharing, including capacity building and technology transfer.

(l) Relationship with the Nagoya Protocol

To elucidate the relationship with the Nagoya Protocol and thereby also create legal certainty for users, the relationship between DSI and genetic resources should be clarified. In general, it should be specified that initial access to genetic resources and their utilization is governed by the Nagoya Protocol, which can include agreements on data publication, whereas access to DSI and its utilization should be governed by the multilateral mechanism (see *supra* under (b)).

After a corresponding agreement (PIC and MAT) that allows for publication of data generated from genetic resources, DSI will be under the scope of the multilateral mechanism. Any options that subsequently allow bilateral negotiations as a prerequisite for the availability of individual DSI nullify the freedom of data granted by the multilateral mechanism, which is essential for basic research and strongly amplifies legal certainty.

(m) Role, rights and interests of indigenous peoples and local communities, including associated traditional knowledge

From our perspective, the fair inclusion of indigenous peoples and local communities (IPLC) in the DSI mechanism is essential as they are often guardians of biodiversity. Therefore, IPLCs should participate in any benefit-sharing mechanism. The mandatory use of provenance data, such as the BioCultural Label, can lay the foundation for this.⁸ At the same time, the inclusion of such provenance data also serves to make the merits of IPLCs visible. Furthermore, IPLCs should be procedurally involved in the development and evaluation process of the multilateral mechanism. From our perspective, knowledge and local references of IPLCs are an enrichment for research, which was not sufficiently considered in the past. We therefore explicitly support a stronger integration and sustainable involvement as well as local capacity building of IPLCs.

(n) Role and interests of industry and academia

In order to conduct effective basic research, open access to DSI is essential. Basic research ensures that more and more data is made available, enabling more and more research which in

⁸ See e.g. *Golan et al.*, Benefit sharing: Why inclusive provenance metadata matter, *Front. Genet.* 2022, Vol. 13, 1014044. <https://doi.org/10.3389/fgene.2022.1014044>.

turn generates more benefits. In this way, research creates an indispensable prerequisite for any kind of benefit-sharing generated by the utilization of DSI (see *supra* under (b)).

We welcome and support the increased acceptance and integration of the global research community at COP15. We support research and science as indispensable contribution to evidence-based political decision-making.

(o) Linkages between research and technology and the multilateral mechanism on benefit sharing

In the interest of science and research, improving systematic technical and scientific research cooperation and capacity building related to DSI is a desirable goal. Potentials not yet tapped by countries of the global South or by IPLCs can be developed more efficiently and fairly through a multilateral system than with a fragmented structure of a plethora of bilateral mechanisms. The already mentioned principles of monitoring and continuous evaluation (see *supra* under (i)) have to be integrated. Each (developing) country should be provided with improved and enhanced capacities and opportunities to generate, access and utilize DSI to their full potential. Tools to achieve this could include research collaborations, training, knowledge platforms, technology transfer, joint technology development, database satellites, database infrastructures, etc. Following Art. 16 and 18 CBD, this view is also expressed in the Long-Term Strategic Framework for Capacity-Building and Development of the Decision CBD/COP/DEC/15/8 (see under II. Main Focal Areas). While the aforementioned tools rely heavily on personal and thus bilateral relationships associated with the use of genetic resources, the financial resources to purchase the necessary scientific equipment could be provided by the financial fund associated with the multilateral mechanism.

(p) Principles of data governance

The FAIR and CARE principles are essential for basic research, which is why, from our perspective, it is very welcome that these have explicitly found their way into the decision. Furthermore, access to environmental data that is as free as possible is not only a research-guiding principle, but may even be a legal necessity in some countries. Access to DSI must be in line with international agreements on access to environmental information.

Commitments to an unhindered access to environmental information were given a legally binding character in two regional agreements, namely the Aarhus Convention⁹ and the Escazú Agreement¹⁰. The Aarhus Convention, which entered into force in 2001, has been ratified by 45 states and the EU.¹¹ With the ratification by countries such as Kazakhstan, Kyrgyzstan and Tajikistan, the scope of the agreement reaches beyond the European region. The Escazú Agreement is open to 33 countries in Latin America and the Caribbean and has so far been ratified by 13 countries.¹² It entered into force on 22 January 2021. Both international agreements request that a right of access to information on the environment is created by the parties. As both agreements have a very broad understanding of environmental information, DSI are within their scope. In addition to the obligation to provide environmental information held by the respective state authorities, the parties must also ensure the most comprehensive implementation of access to environmental information. Against this context in the Aarhus Convention or the Escazú-Agreement, access to DSI which constitute environmental information must not be impeded.

Conclusion

Against the background of the comments above, the Permanent Senate Commission on Fundamental Issues of Biological Diversity of the DFG observes with concern that in a large number of wordings in the decision CBD/COP/DEC/15/9, opportunities for a combined bilateral-multilateral mechanism are held open. The clear commitment to a multilateral mechanism, as opposed to bilateral or hybrid approaches, is welcomed from the basic research perspective as it is the **only approach that meets the requirements of open access and the reality of internationally accessible DSI databases and their interconnectivity with other databases already existing today**¹³ and at the same time precludes unfair bilateral arrangements.

⁹ Convention on Access to information, public participation in decision-making and access to justice in environmental matters, done at Aarhus, Denmark, on 25.6.1998, accessible at: <https://unece.org/DAM/env/pp/documents/cep43e.pdf> (last accessed 31st March 2023).

¹⁰ Regional Agreement on Access to Information, Public Participation and Justice in Environmental Matters in Latin America and the Caribbean, adopted at Escazú, Costa Rica, on 4 March 2018, accessible at: <https://treaties.un.org/doc/Treaties/2018/03/20180312%2003-04%20PM/CTC-XXVII-18.pdf> (last accessed 31st March 2023).

¹¹ Cf. https://treaties.un.org/Pages/ViewDetails.aspx?src=IND&mtdsg_no=XXVII-13&chapter=27&clang=en (last accessed 31st March 2023).

¹² Cf. <https://www.cepal.org/en/escazuagreement> (last accessed 31st March 2023).

¹³ See *Laird et al.*, Rethink the expansion of access and benefit sharing, *Science* 2020, Vol. 367, 1200. <https://www.science.org/doi/full/10.1126/science.aba9609>; *Scholz et al.*, Multilateral benefit-sharing from digital sequence information will support both science and biodiversity conservation, *Nature communications*, 2022, 13, 1086. <https://doi.org/10.1038/s41467-022-28594-0>.



Deutsche Forschungsgemeinschaft

Kennedyallee 40 · 53175 Bonn

Postanschrift: 53170 Bonn

Telefon: +49 228 885-1

Telefax: +49 228 885-2777

postmaster@dfg.de

www.dfg.de